

que GSE medio-bajo presentó 3 veces más riesgo de incumplimiento que GSE alto (OR = 3.26; IC95% 1.04–10.28; $p = 0.043$). Los sujetos con escolaridad <9 años presentaron 2.5 veces más riesgo de incumplimiento que aquellos con escolaridad >12 años (OR 2.5; IC95% 1.01–6.02; $p = 0.047$). La condición de hombre del GSE medio-bajo presenta 11 veces más riesgo de incumplimiento que GSE alto (OR 11.0; IC95% 1.11–109.39; $p = 0.041$). Al estudiar el incumplimiento a la dosis prescrita, al tiempo de uso o ambas, se observó que GSE medio-bajo presentó 3.6 veces más riesgo de incumplimiento que GSE alto (IC95% 1.19–10.71; $p = 0.023$). **CONCLUSIONES:** Los ingresos económicos y el nivel de escolaridad son factores determinantes en el cumplimiento de los tratamientos con antidepresivos en Santiago, Chile. Por lo tanto, las estrategias sanitarias deberían estar dirigidas a disminuir las inequidades producidas por estas condiciones.

PMH9

VALIDATION OF PEER RELATIONS SCALE FOR ADOLESCENTS TREATED FOR SUBSTANCE USE DISORDER: AN APPLICATION OF RASCH MODELING

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OBJECTIVES: A significant and growing body of literature indicates that positive supportive peer relations are protective of relapse for adolescents treated for psychoactive substance use disorder (PSUD). Unfortunately, no standard measure of peer relations exists. The objective of this research is to use Rasch modeling as an application of item response theory (IRT) to validate a 14-item peer relations scale for use in outcomes assessments in this treatment population. **METHODS:** Subjects are 509 adolescents discharged from primary substance abuse treatment from 2004–2007. The data is from an outcome assessment conducted between 6 and 12 months post discharge via a 234-item questionnaire that included the 14-item peer relations scale. The scale has questions that assess the degree to which the adolescent's peers conform to norms of positive behavior and the degree to which the peers are supportive of abstinence and recovery. Response rate was 62%. **RESULTS:** The person reliability is 0.76 and the Cronbach's alpha person raw score reliability is 0.93 both indicating the scale is a strong metric. The item reliability of 0.99 is high and shows that the model is reliable. The real separation (8.49) meaning items are placed reliably on the Rasch "ruler" with about eight levels of importance identified. The mean-square (MNSQ) statistic of the infit and outfit values were between 0.5 and 1.5 for all of the items indicating a low level of randomness and thus unidimensionality of the scale. Visual inspection of a Wright Item Map shows the hierarchical structure of the scale with a moderate degree of inter-item spread. Similarly, the standardized t-tests (Z-STD) shown on a pathway bubble chart indicate a moderate degree of item overlap. **CONCLUSIONS:** The Rasch IRT analysis shows the peer relations scale is a reliable unidimensional metric of an important treatment outcome for adolescents treated for PSUD.

MUSCULAR-SKELETAL DISORDERS – Cost Studies

PMS1

BUDGET IMPACT ANALYSIS OF ZOLEDRONIC ACID IN POST MENOPAUSAL OSTEOPOROSIS BY BRAZILIAN PUBLIC HEALTH CARE SYSTEM

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OBJECTIVES: To determine the budget impact of incorporating zoledronic acid to treat post-menopausal osteoporosis in Brazilian public reimbursement system. **METHODS:** This study considered only postmenopausal women with osteoporotic hip fracture above the age of 65. According to DATASUS (public health care system's database), in 2007 there were 11,666 women with these characteristics. The mortality rate considered for this population was higher than for those of general population. It was applied a relative risk found on literature review for post-fracture years on IBGE's (Brazilian Institute of Geography and Statistics) mortality rate by other causes. Only direct medical costs were considered. Based on DATASUS, the follow-up exams costs were equivalent to US\$37.37 (conversion rate in March 16th = R\$2.27/USD 1.00) per year per patient. The average cost of procedure to treat the fracture was extracted from Tabwin (public health care system's database). The annual costs with zoledronic acid and sodium alendronate were US\$341.99 and US\$12.68, respectively. It was presumed 5% per year as zoledronic acid market share in this population and the remaining patients of each year would continue the treatment with alendronate. **RESULTS:** The annual impact estimated for 3 consecutive years is US\$1.6 million for National public health care system. **CONCLUSIONS:** If only post-menopausal women over 65 years old with osteoporotic hip fracture were eligible to zoledronic acid treatment, and presuming that only 5% of this patients per year would take this medication, an incremental expense of approximately US\$1.6 million per year was estimated in this analysis. It is expected that this annual increase does not continue for many years, once the population eligible to treatment is elderly.

ANÁLISE DE CUSTOS DE RITUXIMABE VERSUS INFILIXIMABE, ADALIMUMABE, ETANERCEPT E ABATACEPTE PARA TRATAMENTO DA ARTRITE REUMATÓIDE SOB A PERSPECTIVA DE UM PAGADOR PRIVADO NO BRASIL

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OBJETIVOS: Estimar o custo médio anual por paciente do tratamento das terapias que podem ser utilizadas na falha de anti-TNF sob a perspectiva de um pagador privado no Brasil. **MÉTODOS:** Como até o momento não foram identificados estudos clínicos que comparassem diretamente as drogas utilizadas na falha de anti-TNF assumiu-se que as terapias têm os mesmos desfechos clínicos, em linha com a metodologia utilizada pela autoridade australiana de avaliação de tecnologias (PBAC, 2007). O uso de recursos médicos referentes a biológicos, metotrexato, administração endovenosa e exames de triagem e rotina, foram levantados com reumatologistas. A dose considerada para infliximabe foi de 300 mg, conforme observado nos convênios médicos. Então se procedeu ao micro-custeio dos recursos utilizados. As fontes para os custos foram: revista Kairos margo 2009 para medicamentos, o artigo de Scheinberg et al. (2005) para custo de administração e CBHPM para exames. O horizonte de tempo da análise é de cinco anos. A taxa de desconto utilizada foi de 5% conforme diretrizes brasileiras de avaliação de tecnologias em saúde (Vianna et al., 2007). Análises de sensibilidade uni- e bi-variadas foram conduzidas. **RESULTADOS:** No cenário base, o custo médio anual de rituximabe foi de R\$ 47,515 por paciente. Para as outras drogas os custos médios anuais por paciente foram: R\$ 86,918 (infliximabe), R\$ 93,098 (adalimumabe), R\$ 92,778 (etanercepte) e R\$ 75,244 (abatcepte). A economia por paciente pode variar de 37% a 49% quando comparamos rituximabe com abatcepte e adalimumabe, respectivamente. Como os custos de aquisição das drogas representam pelo menos 94% dos custos totais, os resultados foram sensíveis à posologia dos biológicos e ao custo de aquisição de drogas. **CONCLUSÕES:** Os achados sugerem que a terapia com rituximabe, no tratamento da falha de anti-TNF pode trazer economia de recursos sob a perspectiva do pagador privado no Brasil.

PMS4

COSTO-EFECTIVIDAD DEL USO DE ETANERCEPT VS LOS ANTICUERPOS MONOCLONALES ANTI-TNF EN PACIENTES CON ARTRITIS REUMATOIDE EN COSTA RICA

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OBJETIVOS: Determinar la razón de costo-efectividad incremental (RCEI) de etanercept versus los anticuerpos monoclonales anti-TNF en el tratamiento de pacientes con AR tomando como base una perspectiva institucional en Costa Rica. **METODOLOGÍAS:** Se desarrolló un modelo de análisis de decisión para comparar la razón de costo-efectividad de etanercept (25 mg dos veces por semana) versus adalimumab (40 mg cada dos semanas) e infliximab (3 mg/Kg semana 0, 2, 6 y después cada 8 semanas) en pacientes bajo tratamiento de AR con una respuesta inadecuada a los fármacos modificadores de la enfermedad (FARMEs) comúnmente utilizados. Tomando como base el precio unitario de cada biológico, se estimó el costo anual de tratamiento con cada alternativa. Considerando las tasas de respuesta ACR (American College of Rheumatology, Colegio Americano de Reumatología) 50 reportadas en la literatura, se estimó la razón de costo-efectividad incremental. **RESULTADOS:** El costo anual de tratamiento con etanercept, adalimumab e infliximab por paciente fue de USD\$15,184, USD\$14,872 y USD\$15,336 respectivamente. Las tasas de respuesta ACR50 de etanercept, adalimumab e infliximab publicadas en la literatura científica son 69%, 41% y 21% respectivamente. La RCEI por paciente adicional que alcanza una respuesta ACR50 con etanercept en comparación con adalimumab fue de USD\$1114 y etanercept resultó una estrategia dominante frente a infliximab. **CONCLUSIONES:** De acuerdo a los resultados, el uso de etanercept en pacientes con AR es una alternativa costo-efectiva en comparación con adalimumab al tomar como umbral de costo-efectividad el PIB per cápita sugerido por la Organización Mundial de la Salud, y costo-ahorradora al comparar etanercept con infliximab. Si se incrementara el uso de etanercept una mayor cantidad de pacientes tendrían acceso al tratamiento con terapias biológicas y la Caja de Seguridad Social podría contener costos en el tratamiento de la AR en Costa Rica.

PMS5

COST-EFFECTIVENESS OF THE USE OF ETANERCEPT VS ANTI-TNF MONOCLONAL ANTIBODIES IN PATIENTS WITH RHEUMATOID ARTHRITIS IN MEXICO

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OBJECTIVES: To determine the incremental cost-effectiveness ratio (ICER) of etanercept (a fusion protein) versus other two anti-TNF- α monoclonal antibodies used in the treatment of RA, based on a payer perspective. **METHODS:** A decision analytic model was developed to compare the cost-effectiveness of etanercept (25mg twice-weekly) versus adalimumab (40mg every other week) and infliximab (3mg/Kg in the weeks 0, 2, 6 and then every 8 weeks) in RA patients with an inadequate response to DMARD's. To build the model, the price per unit paid by the government Hospitals was considered, taking into account the annual total therapy cost. Results on efficacy measures from published clinical trials considering an ACR 70 criteria (change from the basal in 70% of the ACR parameters) was used in the estimation of the incremental